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THE RISSOID SPECIES DESCRIBED BY J.-J. OBERLING***

KEY WORDS: Taxonomy, Rissoidae, lectotypes, Mediterranean Sea

Abstract

Between 1970 and 1972 Dr. Oberling described new taxa from the Mediterranean Sea. Unfortunately holotypes were not designated and only a few specimens were figured. In this article (syn) type material is re-examined and figured. Lectotypes are selected for *Rissoa minoica* (a junior synonym of *R. scurra*), *R. rudis hyperrudis* (a junior synonym of *R. rudis* s.str.), *Alvania capuleti*, (a junior synonym of *A. lineata*), *A. colossophilus* (a valid species), *A. fractospira* (it belongs to the *A. lanciae* complex), *A. trinacriae* (a junior synonym of *A. subareolata*), *Cingula nikolariana* (a valid species, provisionally regarded as an *Onoba* species) and *Rissoa similis excelsior* (a junior synonym of *R. lia*). There is no type material available for *Alvania geronimoi*, a species belonging to the *A. dictyophora* complex. *A. lucinae* is regarded a valid species.

Riassunto

J.J. Oberling (Musée d'Histoire Naturelle de Berne, MHNB Suisse), descrisse, in tre articoli pubblicati tra il 1970 e il 1972, alcuni nuovi taxa per il Mar Mediterraneo. In tale occasione l'Autore non designò ufficialmente degli otopi e raffigurò solo tre taxa con schematici disegni. La possibilità offertaci dal Dr. Oberling di studiare il materiale concernente i Rissoidae, ha offerto l'occasione di riesaminare e raffigurare quasi tutti i nuovi taxa proposti per tale famiglia. Non sempre, per vari motivi, è stato possibile giungere ad una completa definizione dello status tassonomico di tali taxa. Sono qui selezionati dei lectotipi per *Rissoa minoica* (sinonimo junior di *R. scurra*), *R. rudis hyperrudis* (sinonimo juniore di *R. rudis* s.s.), *Alvania capuleti* (sinonimo juniore di *A. lineata*), *A. colossophilus* (specie valida, = *A. karpatboensis* NORDSIECK), *A. fractospira* (appartenente al complex di *A. lanciae*), *A. trinacriae* (sinonimo juniore di *A. subareolata*), *Cingula nikolariana* (specie valida, provvisoriamente posta nel genere *Onoba*) e *Rissoa similis excelsior* (sinonimo juniore di *A. lia*). Non è risultato essere disponibile materiale tipico di *Alvania geronimoi*, che dall'esame di topotipi appare rientrare nel complex di *A. dictyophora*. *Alvania lucinae* è considerata una specie valida.

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*** Lavoro accettato il 22 maggio 1991.

Introduction

In 1970, Dr. J.-J. Oberling of the Musée d'Histoire Naturelle de Berne (= MHNB, Switzerland) started, after ten years collecting along the Mediterranean beaches, with the description of molluscan species. Unfortunately, his french descriptions were very short and only from three species simple line drawings were published. In a 1971 publication additional information concerning his previously described species was given and 2 additional taxa were described. In OBERLING (1972) only additional data are presented and the author admits that his 1970 and 1971 papers were premature and the validity of some taxa is doubted. In OBERLING (1970) the following new taxa were introduced: *Acmaea curvissior*, *Gibbula huberti*, *Rissoa minoica*, *Rissoa rudis hyperrudis*, *Alvania capuleti*, *Alvania colossophilus*, *Alvania fractospira*, *Alvania geronimoi*, *Alvania lucinae*, *Alvania trinacriae*, *Cingula nikolariana*, *Eulima franquiae*, *Aclis micromegas*, *Aclis macromegas*, *Cythara thapsiae*, *Clathromangelia loiselieri*, *Odostomia improbabilis*, *Odostomia imponderabilior*, *Odostomia audiae*, *Odostomia languedocensis*, *Menestho galatensis*, *Retusa multiquadrata*, and *Retusa icarae*. In OBERLING (1971) *Rissoa similis excelsior* and *Saccoina galatensis* were described.

The intention of this paper is to review and figure the new taxa belonging to the family Rissoidae only on conchological characteristics. We do not always have a final point of view about the specific identity of some taxa. A different way of study is needed to solve these problems.

All lectotypes are in the Musée d'Histoire Naturelle de Berne (=MHNB, Switzerland).

Rissoa minoica Oberling, 1970
fig. 1, 12

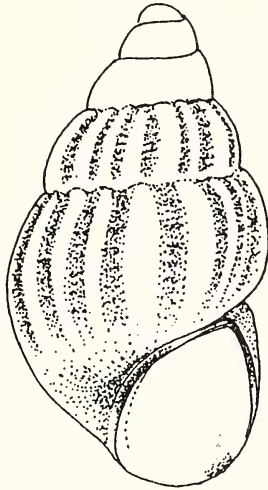


fig. 1

Type locality: Greece, Crete, «Malia».

Type material: Oberling did not mention the number of specimens he studied nor did he designate a holotype. In MNHB one syntype was available which we designate as lectotype. Measurements: length 1.9 mm, width 1.0 mm (fig. 1).

Original description: Generally without colour, with 3 brown dots on the peristome, some specimens have colouration on the bodywhorl but not towards the spire. Axial cords present on greater part of bodywhorl but the punctuated spirals characteristic for the *R. similis* complex are obsolescent (translated from the french).

Short description lectotype: Shell with 3 smooth and 2 ribbed whorls. Last quarter of bodywhorl smooth, except growth lines. Bodywhorls with 8 axial ribs, intermediate areas with vague spirals. Aperture simple, drop-shaped. Colour: white, opaque, bodywhorl partly translucent white. Axial ribs milky white. Aperture with 3 brown spots.

Remarks: OBERLING (1970:2) compared his taxon with *R. similis* and *R. similis* var. *amphorula* BRUGNONE & MONTEROSATO. In 1971, the author assigned it to the subgenus *Apicularia* and gave some additional information concerning its distribution in the Mediterranean (also known from Sicily). In the Monterosato's collection (Rome) it is, according to OBERLING (1971), labelled with the ms name «*Rissoa irregularis*». NORDSIECK (1972:207) considered it a form of *Apicularia (Sfaxiella) scurra* (MONTEROSATO, 1917).

After studying the lectotype, we consider *R. minoica* to be a junior synonym of *Rissoa scurra* MONTEROSATO, 1917. For a detailed description and variability of *R. scurra* see VERDUIN (1985).

Rissoa rudis hyperrudis Oberling, 1970
fig. 2, 13

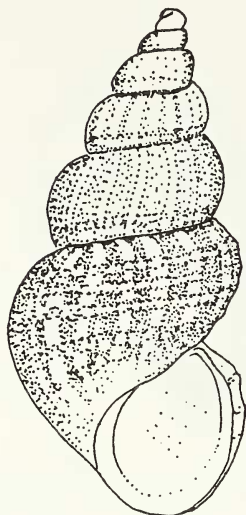


fig. 2

Type locality: France, «La Franqui, Aude»

Type material: OBERLING (1970) did not mention the number of specimens he studied. We designate the specimen (fig. 2) he kindly send us in loan as lectotype of *R. rudis hyperrudis*. Length 2.5 mm, width 1.3 mm

Original description: Shell large, slender, upper whorls with one spiral cord just above the suture in contrast to *R. rudis* ss. and *Alvania scabra*, which ave 2 spiral cords. Its taxonomic value is very doubtful and it is even possible that it concerns a valid species (translated from the french).

Short description lectotype: Protoconch 1 1/2 whorls, smooth. First teleoconch whorl (= tw) with hardly visible axial ribs and one spiral cord. Second tw with 2 spirals and obvious axial ribs. Third tw with 2 spiral cords and axial ribs. Penultimate whorl with only axial ribs and bodywhorl with axial ribs. One spiral forming the periphery and 3 spirals above. Axial ribs gradually disappearing on lower part of bodywhorl. Colour: Apex white, first 3 whorls light brown, gradually growing straw-coloured and translucent. Below suture a few vague brown blotches. Just before varix a darker adapical spot.

Remarks: According to OBERLING (1970:2) «le statut taxonomique de *hyperrudis* est fort douteux», which means that the taxonomic value is doubtful. He does not enumerate type material. In OBERLING (1971) it is considered a full species and additional information concerning its distribution is given. We agree with AMATI et al. (1987) that *Alvania rudis hyperrudis* be included in the variability of *A. rudis* s.s. and therefore is a junior synonym. For SEM pictures of *A. rudis* ss. see Van AARTSEN & MENKHORST (1988).

Alvania capuleti OBERLING, 1970
fig. 3, 14



fig. 3

Type locality: France, «St. Tropez, en Provence».

Type material: OBERLING (1970:2) did not indicate type status of any shell, but only that it is a common species along the coast of the Provence. We received three syntypes from which we designate a specimen with measurements length 2.6 mm, width 1.7 mm to be the lectotype (fig. 3). The other 2 paralectotypes are donated to ZMA (Moll. no. 3.70.002).

Original description: Shell close to *A. lineata* RISSO but having more spirals (between 5-7) on penultimate whorl in contrast to *A. lineata* which has 4 spirals. Colour beige to pink.

Short description lectotype: Protoconch of one convex whorls, abraded but above suture a microsculpture of granules which may be arranged in spiral rows. About 4 1/2 tw without microsculpture. First tw 2 spirals cords crossed by 7 axials. Second tw with 4 spirals crossed by 8 axial. Penultimate whorl with 4 spiral cords crossed by 7 axial, giving rise on crossings to nodules. Bodywhorl on ventral side 12-13 spiral cords, the first 7 (adapical) crossed by 7 axial with nodules on crossings. No umbilicus. Aperture smooth inside. Colour: Apex white, other parts of protoconch and teleoconch light orange-brown. Spirals somewhat darker brown.

Remarks: Oberling compared his taxon with *A. lineata* RISSO of which NORDSIECK (1972:193) considered it a junior synonym. In OBERLING (1972: 2-3) he concluded after studying additional material that it represents a subspecies of *A. lineata*. However, he also mentioned that in certain areas both form occur sympatrically which made a subspecific rank doubtful. We consider it one of the forms of the polymorphic *A. lineata*. For SEM illustrations of *A. lineata* we refer to PALAZZI (1988).

Alvania colossophilus OBERLING, 1970
fig. 4, 15

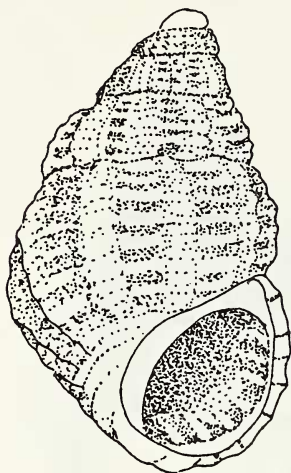


fig. 4

Type locality: Greece, «Phaliraki, Rhodes».

Type material: OBERLING (1970: 2) only mentioned a length of 5 mm, but he sent us one syntype specimen with measurements length 4.1 mm, width 2.5 mm, which we designate as lectotype.

Original description: Related to *A. lineata*, whorls convex, 5 spiral cords on penultimate whorl. Cords pale, intermediate area reddish [translated from the french]

Short description lectotype: Shell eroded, protoconch missing, 5 tw. Penultimate whorl with 5 spiral cords crossed by 5 axial ribs. Bodywhorl with 10 spiral cords crossed by 6 axial ribs. Aperture with 8 lirae inside. No umbilicus. Colour: Teleoconch light brown to orange, interspaces somewhat darker brown.

Remarks: NORDSIECK (1972: 193) considered it a subspecies of *Alvania costulosa* RISSO, 1826. We agree with OLIVERIO et al. (1986: 43) and AMATI et al. (1990: 47), who considered it a valid species and figured a syntype. *A. karpathoensis* NORDSIECK, 1972 is proposed as a junior synonym.

Alvania geronimoi OBERLING, 1970

Type locality: Italy «Magnisi, Sicile»

Type material: There is no type material available. According to OBERLING (1987, in litt.) probably «lost through... exchanges» [loans].

Original description: Shell small (2 x 1 mm), in outline like *A. reticulata* with a pattern of spiral and axial ribs forming large squares. On first teleoconch whorls 2 spiral cords, bodywhorl with 3 spirals. Shell semi-transparent, amber colour with darker areas towards the sutures [translated from french].

Remarks: In OBERLING (1972: 1-2) the species is redescribed with additional information. However, without type material and/or a type figure, it is difficult to identify this taxon. Examination of topotypes donated by Oberling to one of us (M.O.) revealed that it is a form of the *A. dictyophora* complex.

Alvania fractospira OBERLING, 1970
fig. 5, 16

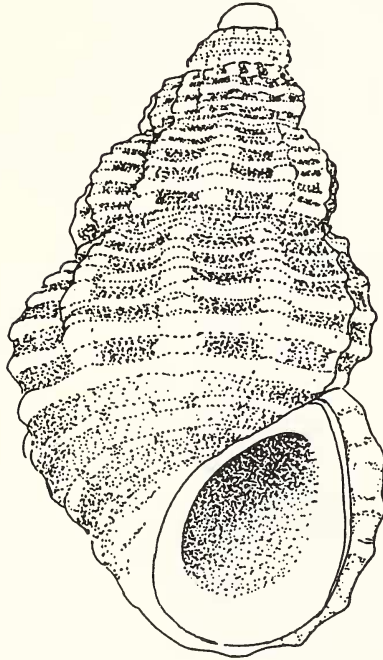


fig. 5

Type locality: «Île de Kolocep en Yougoslavie»

Type material: No indication in the original description of OBERLING (1970: 3) about the number of specimens studied. We received in loan a syntype with measurements length 2.5 mm, width 1.3 mm, which we designate lectotype.

Original description: Shell small (3.2 x 1.7 mm), close to *A. montagui* PAYR, but more slender, and the colour like the east mediterranean variety. Upper part with 3 brown spirals (in *A. montagui* 2 spirals) making a carina where they connect the somewhat broader, white spirals (translated from the french).

Short description lectotype: Although eroded, the protoconch of one whorl with microsculpture of dense granules. Four teleoconch whorls. First tw with 2 spiral cords and about 8 axial ribs. Second tw with 4 spirals a few very small ones just below suture and one small spiral just above the suture, 10 axial ribs. Penultimate whorl with 5 (and a smaller one just above abapical suture) spirals and 6 axial ribs. Just below the abapical suture of that whorl very fine spiral threads. Bodywhorl with 10 spiral cords of which the upper 6 are crossed by 6 axial ribs. Aperture entire, with 7 denticles on outer lip. Microsculpture of spiral cords consists of 12-15 very fine

spiral threads. Colour: Protoconch white, first and 2nd teleoconch whorls whitish yellow, spirals with irregular brown spots. Third whorl with darker blotches between ribs. Bodywhorl with 2 whitish spirals on periphery. Below these white spirals, on a yellow brown background there are 4 smaller, light yellowish brown spirals with regular brown spots. Last spiral and umbilical area white. Outer lip thickened, whitish with irregular brown blotches. Peristome simple, aperture semi-circular.

Remarks: In OBERLING (1971: 1) additional information is given and it is reported that the types were collected by Mr. Fr. Robert (La Chau-de-Fonds). NORDSIECK (1972: 192) considered it a junior synonym of *Alvania consociella* (MONTEROSATO, 1884). In our opinion it belongs to the *A. lanciae* complex.

Alvania lucinae OBERLING, 1970

fig. 6, 17



fig. 6

Type locality: France, «St. Tropez»

Type material: Two syntypes (now considered paralectotypes ZMA Moll. 3.7003), length 1.5 x 0.9 mm (fig. 6) and 1.3 x 0.8 mm. OLIVERIO et al. (1986) being the first revisers already figured the holotype, now considered the lectotype.

Original description: Shell like a small *A. pagodula*, maximum length 1 1/2 mm, whorls convex. Teleoconch whorls with 2 strong spiral cords, the upper one more pronounced and above these cords 2 minor spirals. Just below suture about 6 brown spots on a whorl [translated from the french]

Remarks: In OBERLING (1971: 1-2) the original description is enlarged. NORDSIECK (1972:180) considered it (with some doubts) a junior synonym of *Alvania watsoni* WATSON, 1873, OLIVERIO et al. (1986:44, fig. 2), who figured the holotype and PALAZZI (1987: 119) considered it a valid species and *A. gothica* Van AARTSEN & Van der LINDEN, 1986 a junior synonym. This opinion is confirmed by AMATI et al (1990). For a detailed description of this taxon see above mentioned authors.

Alvania trinacriae OBERLING, 1970
fig. 7, 18

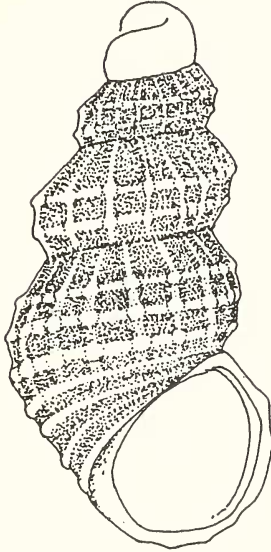


fig. 7

Type locality: Italy, «Trapani, en Sicile».

Type material: One syntype with measurements: length 2.1 mm, width 1.1 mm. We herewith designate this specimen to be the lectotype of *A. trinacriae* OBERLING, 1970.

Original description: Often wrongly identified as *Alvania caribaea* d'ORBIGNY or *A. subareolata* MTRS. Shell slender (2 x 1 mm) with a regular reticulated sculpture and a colour like *A. geronimoi*. First teleconch whorls with 2 spiral cords, the upper one more pronounced. On penultimate whorl an additional cord appears above the 2 main spiral cords. Nearly 16 axial ribs on a whorls [translated from the french].

Short description lectotype: Protoconch of non-planktrophic development type. Colour uniform yellowish white. First and 2nd teleconch whorls with 2 spirals. Bodywhorl with 6 spirals and about 18 axial ribs. Aperture subcircular, with varix.

Remarks: We have compared the lectotype of *A. trinacriae* with large samples of *A. subareolata* and are convinced that both names are synonyms. For good SEM figures of the latter see MELONE & SABELLI (1980).

Cingula nikolariana OBERLING, 1970
fig. 8-9, 19

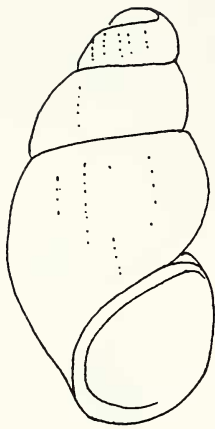


fig. 8



fig. 9

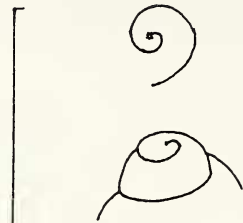


fig. 10

(scale bar 1 mm)

Type locality: Greece, «Malia, Crète».

Type material: OBERLING (1970) mentioned 4 syntypes. We have studied one (with measurements: length 1.7 mm, width 0.9 mm), which we designate as lectotype.

Original description: Shell very small (length 1 1/2 mm). Looks like a *A. nitida* but smaller and more delicate and without a thickened outerlip (translated from the french).

Short description lectotype: Shell minute, with 4 smooth convex whorls. Protoconch 1/2 (?) whorl, (probably) smooth. Suture deep. Aperture small, entire with a hardly visible umbilical chink. Colour white transparent.

Remarks: In OBERLING (1972:4) some additions concerning the description are presented. NORDSIECK (1972: 167) considered it a junior synonym of *Peringiella epidaurica* (BRUSINA, 1866). On conchological characteristics this species has superficial resemblance to *Hyala vitrea* (MONTAGU, 1803). The only difference is the protoconch, which is rissoid-like in *C. nikolariana* (fig. 9) and iravadiid in *Hyala vitrea* (fig. 10). Besides, the latter has a microscopic spiral sculpture on the teleoconch whereas *C. nikolariana* is smooth (see also *Onoba lincta*, in HOENSELAAR & MOOLENBEEK 1987). We consider it a valid species and without having studied live animals we provisionally assign it to the genus *Onoba*.

Rissoa similis excelsior OBERLING, 1971
fig. 11, 20

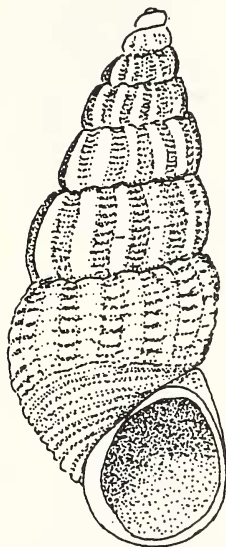


fig. 11

Type locality: Sea of Marmara, Turkey, «Ile d'Avsha» [now nameds Türkeli]

Type material: A syntype (with measurements: length 6.1 mm, width 2.5 mm) is selected as lectotype.

Original description: Differs from *R. similis* by being larger, ranging from 3-7.2 mm, mean length 5.5 mm. Peristome and anterior part of shell violet, spiral grooves much broader than the spiral cords, without punctuation, only sometimes crossed by growth lines [translated from the french description].

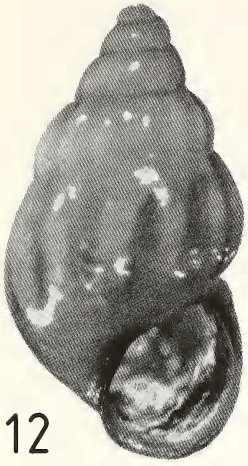
Short description lectotype: Shell translucent white. Aperture and part of base violet.

Remarks: NORDSIECK (1972: 206) described the new subspecies *Apicularia similis distantestriata* and considered *excelsior* a possible senior synonym. Oberling kindly donated 5 (not belonging to the syntype serie) specimens to ZMA. Provisionally we consider it giant specimens of *Rissoa lia* (BENOIT in MONTEROSATO, 1884).

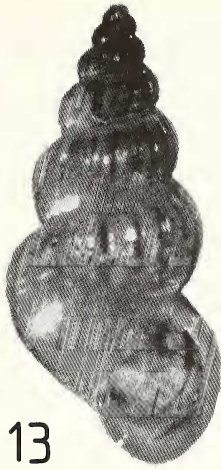
ACKNOWLEDGEMENTS

We are grateful to Dr. J.J. Oberling, who kindly gave us the opportunity to study his type material. The drawing were made by H.J. Hoenselaar and L.A. van der Laan made the photographs.

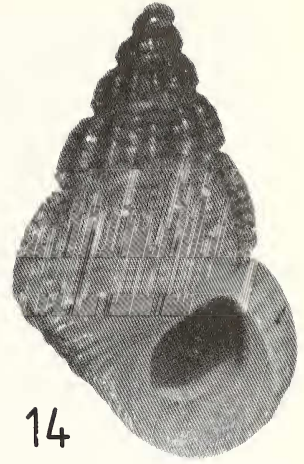
- fig. 12. *Rissoa minoica* Oberling, 1970, lectotype, Malia, length 1.9 mm
fig. 13. *Rissoa rudis hyperrudis* Oberling, 1970, lectotype, La Franqui, length 2.5 mm
fig. 14. *Alvania capuleti* Oberling, 1970, lectotype, St. Tropez, length 2.6 mm
fig. 15. *Alvania colossophilus* Oberling, 1970, lectotype, Phaliraki length 4.1 mm
fig. 16. *Alvania fractospira* Oberling, 1970, lectotype, île de Kolocep, length 2.5 mm
fig. 17. *Alvania lucinae* Oberling, 1970, paralectotype, St. Tropez, length 1.5 mm
fig. 18. *Alvania trinacriae* Oberling, 1970, lectotype, Trapani length 2.1 mm
fig. 19. *Cingula nikolariana* Oberling, 1970, lectotype, Malia, length 1.7 mm
fig. 20. *Rissoa similis excelsior* Oberling, 1971, lectotype, ile d'Avsha, length 6.1 mm



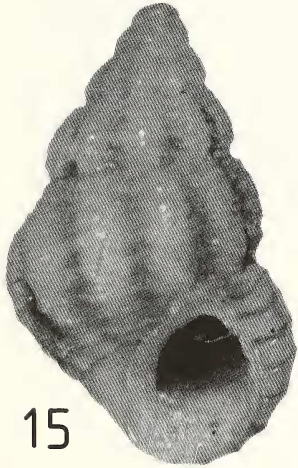
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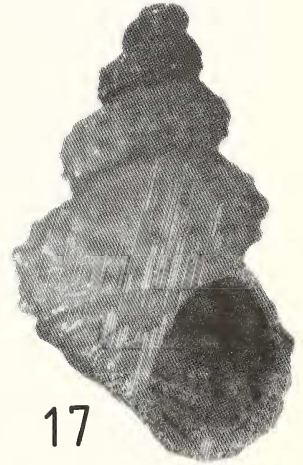
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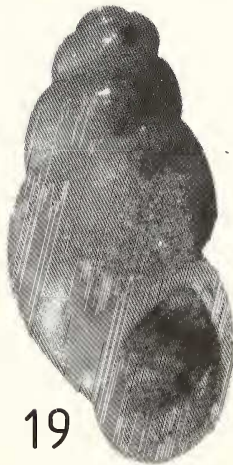
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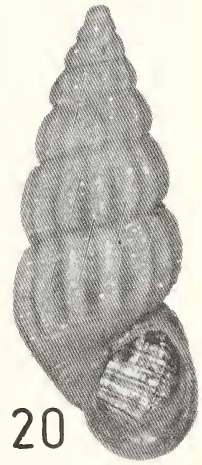
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18



19



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